

### Abstract

The invention provides methods of treating cells wherein cells in a specimen containing mucus-producing cells are stabilized, mucus in the specimen is removed without affecting the cell morphology, or cells in the specimen are dispersed individually; and reagent kits to be used in said treating methods. After the cells are stabilized by treatment with a solution containing an aldehyde compound, the cell populations can be dispersed by treatment with protease. In the case of specimens containing cells aggregated with mucus, the processes of stabilizing and treating with protease may be conducted after the mucus is removed. In order to remove mucus, cysteine and/or a compound derived therefrom is preferably used.